



State Water Resources Control Board

Division of Drinking Water

March 10, 2017

System No.: 2400323

Mr. Luis Oliviera, Co-Owner Stevinson Bar and Grill 1012 15th Street Modesto, CA 95354

RE: CITATION NO. 03-11-17C-013, Source Flow Meter

Enclosed is a Citation issued to the Stevinson Bar and Grill (hereinafter "Water System") public water system.

The Water System will be billed at the State Water Resources Control Board's (hereinafter "State Board") hourly rate (currently estimated at \$161.00) for the time spent on issuing this Citation. California Health and Safety Code, Section 116577, provides that a public water system must reimburse the State Board for actual costs incurred by the State Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation. At this time, the State Board has spent approximately 2.0 hour(s) on enforcement activities associated with this violation.

The Water System will receive a bill sent from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the District for the current fiscal year.

If you have any questions regarding this matter, please contact Austin Ferreria of my staff at 559-447-3300 or me at 559-447-3316.

Sincerely,

Hawara Chauhan

Kassy D. Chauhan, P.E.

Senior Sanitary Engineer, Merced District

Central California Section

SOUTHERN CALIFORNIA BRANCH

DRINKING WATER FIELD OPERATIONS

Enclosures

Certified Mail No.: 7016 1370 0000 0455 3253

cc: Merced County Environmental Health Department

TO:

CC:

STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

IN RE: STEVINSON BAR AND GRILL WATER SYSTEM NO. 2400323

Mr. Luis Oliviera, Co-Owner 1012 15th Street

Modesto, CA 95354

Merced County Environmental Health Department

CITATION FOR VIOLATION OF CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64561 Source Flow Meters

Issued on March 10, 2017

Section 116650 of the California Health and Safety Code authorizes the issuance of a citation to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the Stevinson Bar and Grill Water System (hereinafter "Water System") (20104 W. Third Street, Stevinson, CA 95374) for violation of California Code of Regulations (CCR), Title 22, Section 64561.

APPLICABLE AUTHORITIES

The applicable statutes and regulations are provided in Appendix A, attached hereto and incorporated by reference.

STATEMENT OF FACTS

The Water System is a transient-noncommunity water system serving a transient population of approximately twenty-five (25) persons per day through two (2) service connections. Effective April 1, 2014, the Merced County Department of Environmental Health transferred the jurisdictional regulatory oversight for this water system to the Division. The Water System currently operates under a water supply permit (No. 03-11-15P-065) issued by the Division on August 31, 2015 (Appendix B).

The Division conducted a sanitary survey of the Water System on June 5, 2015, and observed that a flow meter was not installed on the discharge piping from Well No. 1. The Division noted the need to install a totalizing flow meter at a point between the source and the entry point to the distribution system and submit photo documentation to the Division by September 30, 2015. In addition, the System was required to begin recording monthly well production quantities on at least a monthly basis and reporting those quantities to the Division annually via the electronic Annual Report to the Drinking Water Program (e-ARDWP). Despite the Division's efforts to inform the Water System of the requirements to install a flow meter and record the total monthly water production, the Water System has failed to install the flow meter and begin reporting the monthly production from Well No. 1 annually to the Division.

DETERMINATION

Title 22, CCR, Section 64561, Source Flow Meters provides that each water system shall install a flow meter at a location between each water source and the entry point to the distribution system and meter the quantity of water flow from each source, and record the total monthly production each month.

26

27

The Division has determined that the Water System failed to comply with Title 22, CCR, Section 64561, Source Flow Meters by failing to install a flow meter at Well No. 1 and for failure to meter the quantity of water flow from each source and record the total monthly production each month.

ADMINISTRATIVE PENALTIES

Pursuant to CHSC Section 116650

Sections 116650(a) of the CHSC allows for the issuance of a citation for failure to comply with the requirements of the California Safe Drinking Water Act, or any regulation, permit, standard, citation, or order issued thereunder. Section 116650(d) and (e) allow for the assessment of a penalty not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurs.

Despite the Division's efforts to work with the Water System, the Water System has failed to comply with Section 64561. Therefore, the Division hearby assesses an administrative penalty of one thousand and five hundred dollars (\$1,500) upon Water System. Directive No. 5 below describes the requirements for payment of the Penalty and conditions under which the Division may waive the requirement to pay the penalty.

DIRECTIVES

The Water System is hereby directed to take the following actions:

- 1. On or before March 31, 2017, submit a written response to the Division indicating its willingness to comply with the directives of this citation.
- 2. On or before May 31, 2017, install a source flow meter on Well No. 1 at a point between the source and the entry point to the distribution system per Section 64561.

- On or before <u>May 31, 2017</u>, submit photo documentation to the Division showing the installation of the flow meter on Well No. 1 at a point between the source and the entry point to the distribution system in accordance with Section 64561.
- 4. Beginning in June 2017 or before, record the total production from each active source a minimum of monthly and report the total monthly production to the Division annually via the Electronic Annual Report.
- 5. Pay the Penalty of one thousand and five hundred dollars (\$1,500) within 90 days of the receipt of this Citation. Payment shall be made payable to the State Water Resources Control Board – Division of Drinking Water. Further instruction on the payment is provided in Appendix C. Notice of Citation Issuance.

If the Water System complies with Directives 1, 2, 3, and 4 before the Penalty becomes due, and upon written request from the Water System, the Division will consider, at its sole discretion, terminating the requirement to pay the penalty.

6. If the Water System is unable to perform the tasks specified in this citation for any reason, whether within or beyond its control, and if the Water System notifies the Division in writing no less than five days in advance of the due date, the Division may extend the time for performance if the Water System demonstrates that it has used its best efforts to comply with the schedule and other requirements of this citation.

The Division reserves the right to make such modifications to the Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

26

27

Nothing in this Citation relieves the Water System of its obligation to meet the requirements of the California Safe Drinking Water Act or any regulation, standard, permit or order issued thereunder.

All submittal required by this Citation shall be submitted to the Division at the following address:

Kassy D. Chauhan, P.E. Senior Sanitary Engineer State Water Resources Control Board Division of Drinking Water 265 W. Bullard Avenue, Suite 101 Fresno, CA 93704

PARTIES BOUND

This Citation shall apply to and be binding upon the Stevinson Bar and Grill Water System, its officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The Directives of this Citation are severable, and the Water System shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Board to: issue citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any permit, regulation or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Board to take action to suspend or revoke a permit that has been issued to a public water system if the system has violated applicable law or regulations or has failed to comply with an order of the Board; and to petition the superior court to take various

1	enforcement measures a
2	the Board. The Board do
3	
4	
5	2 10 00
6	<u>3 - 10 - 20</u>
7	
8	
9	CERTIFIED NO.: 7016 137
10	SERVINIES NO.: 7010 101
11	CLC/KDC/Citation/no flow
12	Appendices:
13	Appendix A: Applicable Au Appendix B: Water Supply
14	Appendix C: Notice of Cita
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	

against a public water system that has failed to comply with an order of bes not waive any further enforcement action by issuance of this citation.

Carl L. Carlucci, P.E.

Supervising Senior Sanitary Engineer, Central California Region

DRINKING WATER FIELD OPERATIONS BRANCH

70 0000 0455 3253

v meter

uthorities

y Permit No. 03-11-15P-065

ation Issuance



APPENDIX A

Applicable Statues and Regulations for Citation No. 03-12-17C-XXX

Section 116650 of the CHSC states in relevant part:

§116650. Citations

- (a) If the Division determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the Division may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The Division may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

Section 64561 of Title 22, California Code of Regulations states in relevant part: §64561. Source Flow Meters.

Each water system shall:

- (a) Except for inactive sources, install a flow meter at a location between each water source and the entry point to the distribution system;
- (b) Meter the quantity of water flow from each source, and record the total monthly production each month.







State Water Resources Control Board

Division of Drinking Water

August 31, 2015

System No.: 2400323

Ms. Angela Oliviera Stevinson Bar and Grill 1012 15th Street Modesto, CA 95354

Dear Ms. Oliviera,

RE: Water Supply Permit – No. 03-11-15P-065

The purpose of this letter is to inform you that the State Water Resources Control Board Division of Drinking Water (Division) has issued a domestic water supply permit for the Stevinson Bar and Grill Water System (System). The Domestic Water Supply Permit, Water Quality Monitoring Schedule, Engineering Report and other documents are attached to this letter. Please review the engineering report and provide any comments or corrections to the Division in writing.

In addition to the permit provisions included in the permit, the following items must be addressed by the System:

- 1. The System must install a flow meter equipped with a totalizer on Well No. 1 as required by the California Waterworks Standards. The System must submit receipts and/or photos as proof of flow meter installation by September 30, 2015. Beginning in October 2015, the System must begin recording the total production from the well at least one time per month and report the monthly production totals to the Division each year on the electronic annual report to the Drinking Water Program (e-AR).
- 2. The System needs to install a sample tap at a location between the wellhead and the pressure tank to allow monitoring of the water produced by the well prior to the distribution system. The System needs to submit photo documentation showing that the sample tap has been installed by September 30, 2015.
- 3. The System needs to raise the well out from underneath the decking area and construct a concrete surface seal to avoid possible contamination from the area around the well becoming flooded. By September 30, 2015, the System must provide a plan for ensuring that the well has been raided out from under the decking and a concrete surface seal has been constructed.

- An Emergency Chlorination Plan must be developed and submitted for the water system by 4. It is recommended that the well be plumbed and wired for September 30, 2015. emergency chlorination equipment installation. Details of what is to be included in the plan can be found in the guidance document attached (Attachment B) to this report.
- The System needs to ensure that the wellhead and the pressure system are physically 5. visited and inspected a minimum of one time per month. Beginning in October 2015, the amount of water produced by the well will have to be recorded on a monthly basis as described above. The area around the wellhead and the pressure tank must be kept free of debris and other items to minimize the risk of the well becoming contaminated.
- The System must conduct a cross-connection control survey to identify potential hazards 6. by September 30, 2015. The System must install backflow prevention devices to prevent possible contamination at the locations identified in the survey by October 31, 2015. A cross-connection control guidance document is provided in Attachment C to this report.
- According to the laboratory results for the routine bacteriological sample that was collected 7. Per the approved in June 2015, the sample was collected from the well tank. bacteriological sample siting plan (BSSP), the approved location for routine distribution system bacteriological monitoring is at the outside hosebib (to the left of the side door of the bar/grill). As such, all routine distribution system bacteriological monitoring must be completed at the outside hosebib (to the left of the side door of the bar/grill). Failure to monitor at the approved routine distribution system bacteriological monitoring location will result in monitoring and reporting violations being issued to the water system.
- The System must complete the required one time monitoring for fluoride, iron, manganese, 8. bicarbonate, carbonate, hydroxide alkalinity, calcium, magnesium, sodium hardness and pH along with the initial nitrate and nitrite monitoring by September 30, 2015, to avoid enforcement action. All water quality monitoring results must be submitted electronically via Electronic Data Transfer (EDT) using the primary station code for Well No. 1 (2400323-001).

Please acknowledge in writing by September 15, 2015, receipt of this water supply permit, your willingness to comply with the permit provisions and any comments or corrections to the technical report. This permit contains an all-inclusive list of applicable special permit provisions.

The assistance provided by you during the inspection is greatly appreciated. If you have any questions regarding the permit provisions or the list of action items above, please contact me at 559-447-3316.

Sincerely,

Jasoy D. Chauban Kassy D. Chauhan, P.E.

Senior Sanitary Engineer

Merced District

Central California Section

SOUTHERN CALIFORNIA BRANCH

DRINKING WATER FIELD OPERATIONS

Ms. Angela Oliviera August 31, 2015 Page 3

Enclosures

Cc:

Merced County Environmental Health Division

KDC/2400326/2015 transmittal letter - Aug 28 2015.doc

State Water Resources Control Board Division of Drinking Water

Certificate of Issuance

WATER SUPPLY PERMIT

RANGE OF SECOND SECOND

TO

Angela Oliviera, Owner For The Operation of The Stevinson Bar and Grill Water System

Operation of The Stevinson Bar and Grill Water System. The permit was issued by the SWRCB - Division of Drinking Water, pursuant Stevinson Bar and Grill Water System, on August 31, 2015, to supply water for domestic purposes to Angela Oliviera, Owner For the to the provisions of Division 104, Part 12, Chapter 4, Article 7, of the California Health and Safety Code. The permit is subject to the This is to certify that a water supply permit 03-11-15P-065 has been issued to Angela Oliviera, Owner For the Operation of The requirements of Title 22, California Code of Regulations, and to the conditions provided in the water supply permit.



Stevinson Bar and Grill Water System or may be obtained by contacting the Merced District Office of the SWRCB - Division of Drinking Water, Field Operations Branch, 265 W. Bullard Ave., Ste. 101, Fresno, A copy of the water supply permit is on file with Angela Oliviera, Owner For the Operation of The

KAXXIII (M. M. M. M. M. Kássy D. Chauhan, P.E., Senior Sanitary Engineer





State Water Resources Control Board Division of Drinking Water

STATE OF CALIFORNIA

DOMESTIC WATER SUPPLY PERMIT ISSUED TO
Ms. Angela Oliviera
For the Operation Of The
Stevinson Bar and Grill Water System
Water System No. 2400323

PERMIT NO. 03-11-15P-065

EFFECTIVE DATE: August 31, 2015

WHEREAS:

- 1. The Stevinson Bar and Grill Water System (System) was operated under the regulatory jurisdiction of the Merced County Environmental Health Department. The change in regulatory jurisdiction beginning April 1, 2014, required a new domestic water supply permit be issued to the Stevinson Bar and Grill Water System.
- 2. The public water system is known as the Stevinson Bar and Grill Water System whose headquarters are located at 1012 15th Street, Modesto, CA 95354 and physical facilities are located at 20104 West Third Street, Stevinson, CA 95374.
- 3. The public water system for which a new domestic water supply permit is being issued is described briefly below:

The System serves a restaurant and one residential unit. The system is classified as a transient-noncommunity (TNC) water system. The System is served by one well that is equipped with a submersible pump and one bladder tank to provide system pressure. The System has a septic system which is located greater than 100 feet from the well.

And WHEREAS:

- 1. The Stevinson Bar and Grill Water System has submitted all of the required information relating to the operation of the water system.
- 2. The State Water Resources Control Board, Division of Drinking Water has evaluated all of the information submitted by the Stevinson Bar and Grill Water System and has conducted a physical investigation of the water system.

Stevinson Bar and Grill Water System Permit No. 03-11-15P-065 August 31, 2015 Page 2 of 3

3. The State Water Resources Control Board, Division of Drinking Water has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

THEREFORE:

- 1. The Stevinson Bar and Grill Water System meets the criteria for and is hereby classified as a transient-noncommunity water system.
- 2. The applicant has demonstrated that the Stevinson Bar and Grill Water System has adequate technical, managerial, and financial capacity to operate the water system.
- 3. Provided the following conditions are complied with, the Stevinson Bar and Grill Water System should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE SYSTEM OWNER, ANGELA OLIVIERA, IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE STEVINSON BAR AND GRILL WATER SYSTEM.

The Stevinson Bar and Grill Water System shall comply with the following permit conditions:

- 1. The permitted active source for the Stevinson Bar and Grill Water System is Well No. 1 (PS Code 2400323-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.
- 2. The Stevinson Bar and Grill Water System must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
- 3. The Stevinson Bar and Grill Water System shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
- 4. The Stevinson Bar and Grill Water System must submit an annual report to the Drinking Water Program each year, documenting specific system information for the prior year. The report shall be in the format specified by the Division and be submitted by the deadline specified by the Division.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the State Water Resources Control Board, Division of Drinking Water. This permit is non-transferable. Should the Stevinson Bar and Grill Water System undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage

Stevinson Bar and Grill Water System Permit No. 03-11-15P-065 August 31, 2015 Page 3 of 3

reservoirs shall not be made unless an application for such change is submitted to the State Water Resources Control Board, Division of Drinking Water.

This permit shall be effective as of the date shown below.

FOR THE STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING WATER

8 3 15

Kassy D. Chauhan, P.E. Senior Sanitary Engineer Merced District

Central California Section

SOUTHERN CALIFORNIA BRANCH

DRINKING WATER FIELD OPERATIONS

KDC/2400323/water supply permit.doc

Engineering Report
For the Consideration of a Revised Permit for
Stevinson Bar and Grill Water System
System No. 2400323
Merced County
August 2015

State Water Resources Control Board
Southern California Branch
Drinking Water Field Operations
Kassy D. Chauhan, P.E - Senior Sanitary Engineer

I. INTRODUCTION

1.1 PURPOSE OF REPORT

The Stevinson Bar and Grill Water System (System) is now under the regulatory jurisdiction of the State Water Resources Control Board—Division of Drinking Water (Division). Formerly, the system was under the local primacy agency of Merced County (County), until April 1, 2014, when regulatory jurisdiction of the County's small water system program was transferred to the Division. The County had granted a CalCode Exemption to the System where they were not a permitted public water system but had to meet all of the requirements of a transient-noncommunity (TNC) water system. The Division has since determined that the System does not qualify for a CalCode Exemption and must be regulated by the Division as a public water system. The purpose of this report is to describe the current state of the water system and to make recommendations regarding the issuance of a permit.

1.2 DESCRIPTION OF SYSTEM

The System serves a restaurant and one residential unit. It is located on West Third Avenue in Stevinson, CA, Merced County. The system is classified as a transient-noncommunity (TNC) water system. The System is served by one well that is equipped with a submersible pump and one bladder tank to provide system pressure. The System has a septic system which is located greater than 100 feet from the well.

1.3 SOURCES OF INFORMATION

Information for the preparation of this report was obtained from Mr. Luis Oliviera, Onsite Manager for the System; system files from the Merced County Environmental Health Department; and a field inspection of the water system conducted on June 5, 2015, by Kassy Chauhan.

Stevinson Bar and Grill Engineering Report August 2015 Page 2 of 14

II. <u>INVESTIGATION FINDINGS</u>

2.1 AREA SERVED

The mailing address and the physical address for the water system is 20104 West Third Avenue, Stevinson, CA 95374. The System serves an average daily population of 50 people year around.

2.2 GROUNDWATER SOURCE OF SUPPLY

Well No. 1 (Active Untreated)

Well No. 1 (PS Code 2400323-001) is located underneath the decking that surrounds the bar and grill. The Well Driller's Completion Report is not on file with the Division. The well is equipped with a submersible pump but the size of the pump is unknown. There is no concrete pad present at the well. The well discharges to a steel pressure tank with an air compressor which supplies the pressure for the distribution system. The discharge piping flows from the pressure tank to the bar and grill and the residential connection. No flow meter is in place on the discharge piping.

The discharge piping from the well does not include any appurtenances and feeds directly to the pressure tank that provides system pressure. The discharge piping from the pressure tank includes a hosebib for sample collection. The pressure system includes a Gould booster pump to provide system pressure. The system pressure at the time of the inspection was approximately 50 psi. System pressure is maintained between 40 and 60 psi.

All water supply wells must have a flow meter installed at a location between the wellhead and the entrance to the distribution system in accordance with the California Waterworks Standards. At the time of the inspection, there was no flow meter installed on the discharge line from the well.

The System must install a flow meter equipped with a totalizer at a location between the wellhead and the entry point to the distribution system as required in the California Waterworks Standards. The system must submit receipts and/or photos as proof of flow meter installation by September 30, 2015. Beginning in October 2015, the System must begin recording the total production from the well at least one time per month and report the monthly production totals to the Division each year on the electronic annual report to the Drinking Water Program (e-AR).

In addition, the System needs to install a sample tap between the wellhead and the pressure tank to enable monitoring of the raw water prior to the water entering the pressure tank.

Stevinson Bar and Grill Engineering Report August 2015 Page 3 of 14

The System needs to install a sample tap at a location between the wellhead and the pressure tank to allow monitoring of the water produced by the well prior to the distribution system. The System needs to submit photo documentation showing that the sample tap has been installed by September 30, 2015.

In addition, the wellhead is located is located below the decking that surrounds the bar and grill. There is no concrete surface seal poured around the well to prevent water from flooding the area around the well casing. Water flooding around the well can cause bacteriological contamination of the well. In addition, the area around the well appeared to be filled with cobwebs and dirt.

The System needs to raise the well out from underneath the decking area and construct a concrete surface seal to avoid possible contamination from the area around the well becoming flooded.

By September 30, 2015, the System must provide a plan for ensuring that the well has been raised out from under the decking and a concrete surface seal has been constructed.

2.3 ADEQUACY OF SUPPLY

No production data is available since there is no flow meter present in the system. According to Luis Oliviera, no water outages have occurred. As mentioned in Section 2.2 above, the System must install a flow meter and read the production data monthly beginning October 2015. The System must report the production data annually to the Division through the Electronic Annual Reports.

2.4 TREATMENT

The System does not provide routine treatment of the water produced by Well No. 1. The System is required to have an Emergency Chlorination Plan on file with the Division. The Emergency Chlorination Plan identifies how the System would adequately disinfect the source and the distribution system if there was a bacteriological contamination event. A review of the System's file showed that there was no Emergency Chlorination Plan on file.

An Emergency Chlorination Plan must be developed and submitted to the Division.

Details of what is to be included in the plan can be found in the guidance document attached to this report. The System should use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by September 30, 2015 (Attachment B) for review and approval.

Stevinson Bar and Grill Engineering Report August 2015 Page 4 of 14

Historically, the System has used a reverse osmosis unit to remove the arsenic from the water produced by the well. The files obtained from the Merced County Environmental Health Department indicated that a filter had been installed due to elevated levels of arsenic. However, the arsenic drinking water standard does not apply to transient-noncommunity water systems so the treatment was installed voluntarily. The filtration system could not be found during the inspection and appears to have been removed from the System.

As noted in the permit provisions, the System must receive approval from the Division's Merced District Office prior to the installation of any treatment at the facilities.

2.5 STORAGE AND DISTRIBUTION SYSTEM

No storage is provided for the water system. System pressure is provided through a 119-gallon steel pressure tank located near the wellhead. The pressure tank consists of an air compressor to ensure that the system is pressurized to at least 40 psi at all locations. The distribution system consists of 1-½ diameter PVC main lines. System pressure is maintained between 40 and 60 psi according to records from the County of Merced.

2.6 OPERATION AND MAINTENANCE

The System is owned by Angela Oliviera. Operation, routine maintenance and all record keeping practices are provided by Luis Oliviera, Onsite Manager for the Water System. The Water System is not required at this point to acquire any level of operator certification since no treatment is provided and the system is classified as a transient-noncommunity water system.

During the inspection, it appeared that the wellhead and the pressure system had not been visited in quite some time. The System needs to ensure that the wellhead and the pressure system are physically visited and inspected a minimum of one time per month. Beginning in October 2015, the amount of water produced by the well will have to be recorded on a monthly basis. The area around the wellhead and the pressure tank should be kept free of debris and other items to minimize the risk of the well becoming contaminated.

2.6.1 Cross-Connection Control Program

The Water System is required to monitor for cross connections on a continual basis and ensure there are adequate backflow prevention devices at all possible contamination points. Backflow prevention devices are to be tested and certified by a licensed Backflow Prevention Device Tester on an annual basis. If applicable, submit copies of the results to the Division.

Stevinson Bar and Grill Engineering Report August 2015 Page 5 of 14

The System must conduct a cross-connection control survey to identify potential hazards by September 30, 2015. The system must install backflow prevention devices to prevent possible contamination at locations identified in the survey by October 31, 2015. A cross-connection control guidance document is provided in Attachment C.

2.6.2 Complaints

Due to the small size of the water system, complaints are received directly by the owner. Once received, the owner diagnoses the complaint and takes whatever actions are necessary to resolve the issue. The Water System must continue to record each complaint received and report that information to the Division on the electronic Annual Report to the Drinking Water Program each year.

2.6.3 Emergency Notification Plan

The Water System has an Emergency Notification Plan on file with the Division dated June 5, 2015. The Plan lists David Oliviera, Angela Oliviera and Luis Oliviera as the contacts in the event of an emergency. The Plan specifies that the written notices will be posted in all places where water from the domestic water supply system can be accessed by the public. These places include the restrooms and at the main entrance to the bar and grill. In addition, the System will notify the Merced County Environmental Health Department in the event a Tier 1 boil water notice is required.

The system must update the Emergency Notification Plan any time system personnel changes occur.

2.6.4 Bacteriological Sample Siting Plan (BSSP)

The Division did not have a Bacteriological Sample Siting Plan (BSSP) on file for the System. A BSSP was created with the assistance of Luis Oliviera during the site inspection. A copy of the completed BSSP is included as Attachment D. The routine distribution system bacteriological monitoring location is identified as the outside hosebib (to the left of the side door). The System must ensure that the routine distribution system bacteriological samples are collected from this location. The BSSP identifies four additional routine distribution monitoring locations to be used the month following a month when there is a total coliform positive sample in the distribution system. The appropriate repeat sample sites for each routine location have been identified.

To comply with the California Groundwater Rule's triggered source monitoring, the System must ensure a source sample is collected any time there is a total coliform positive in the distribution system. One way to ensure this requirement is complied with is to identify the well (Well. No 1) as the third repeat site for each routine distribution system site as indicated on the attached BSSP.

The System must ensure that five routine bacteriological samples are collected the month following a month that total coliform is found in a routine distribution system bacteriological sample. In addition, any time the system pressure drops below 5 psi, the System must provide a Boil Water Order (BWO – Tier 1 Public Notification) to all users of the Water System as well as notify the Division and the Merced County Environmental Health Department. The System must remain on the BWO until special investigative bacteriological samples show that the water in the distribution system is free from coliform bacteria. An example of a BWO – Tier 1 Public Notification is attached (Attachment E).

2.7 SOURCE WATER QUALITY MONITORING

2.7.1 Vulnerability Assessment for Sources

A source water assessment has not been conducted for the system. A source water assessment is an evaluation of a drinking water source that includes delineation of the boundaries of the source area, identification of Possible Contaminating Activities (PCAs) within the delineated area, a determination of the PCAs to which the source is most vulnerable, and a summary of the vulnerability of the source to contamination. A PCA checklist was completed during the inspection and a source water assessment form will be completed in the near future. A copy of the completed source water assessment will be provided to the system upon completion.

2.7.2 Water Quality and Monitoring

It is unknown whether or not the water produced by Well No. 1 complies with all of the applicable primary drinking water standards for the system classification. Initial monitoring and ongoing nitrate and nitrite monitoring have not been completed and are past due. An evaluation of the data will be completed once the System completes the required monitoring as indicated below.

The Water System must comply with the following ongoing water quality monitoring schedule. All water quality monitoring results obtained in a calendar month must be submitted to the Division by the tenth (10th) day of the following month.

Constituent	Frequency	Date last sampled	Next due date
Bacteriological	Minimum of once every three months	6/17/2015	September 2015
Nitrate	Once a year	NONE	Due by 9/30/2015
Nitrite	Once every three years	NONE	Due by 9/30/2015

Stevinson Bar and Grill Engineering Report August 2015 Page 7 of 14

All transient-noncommunity water systems are required to monitor for fluoride, iron, manganese, bicarbonate, carbonate, hydroxide alkalinity, calcium, magnesium, sodium, hardness and pH at least one time. A review of the Division's database showed that the System has not completed the one time monitoring that is mentioned above.

The System must complete the required one time monitoring for fluoride, iron, manganese, bicarbonate, carbonate, hydroxide alkalinity, calcium, magnesium, sodium, hardness and pH along with the initial nitrate and nitrite monitoring by September 30, 2015, to avoid enforcement action. All water quality monitoring results must be submitted electronically via Electronic Data Transfer (EDT) using the primary station code for Well No. 1 (2400323-001).

Far West Laboratories is contracted to collect and analyze one bacteriological sample quarterly from the outside hosebib (to the left of the side door of the bar/grill). The total coliform results are reported as Presence/Absence. It should be noted that Well No. 1 must be analyzed for E. coli bacteria if a routine distribution system sample is positive for total coliform bacteria, as required by the California Groundwater Rule. Since April 2014, one bacteriological sample has been collected, in June 2015, and it was absent of total coliform bacteria. According to the laboratory results, the sample was collected from the well tank. The System must ensure that the routine distribution system bacteriological sample is collected from the outside hosebib (to the left of the side door of the bar/grill) in accordance with the BSSP. Failure to monitor at the correct location will result in the System receiving a monitoring and reporting violation.

A copy of the water quality monitoring schedule for transient-noncommunity water systems is attached (Attachment E).

III. APPRAISAL OF SANITARY HAZARDS & PUBLIC HEALTH SAFEGUARDS

Overall, Stevinson Bar and Grill Water System's water supply facilities are in adequate sanitary condition and appear to be operating satisfactorily under competent supervision. It is unknown whether the water produced by Well No. 1 complies with all of the applicable primary drinking water standards because the initial monitoring has not been completed. A full evaluation of the water quality data will be completed after the initial monitoring is completed to determine compliance with the applicable drinking water standards. The Water System appears to have adequate source capacity since there have not been any low pressure or water outages reported to the Division. After October 2015, the System will be able to monitor the total well production monthly.

IV. CONCLUSIONS AND RECOMMENDATIONS

It is unknown whether or not the Stevinson Bar and Grill Water System produces water that meets all applicable drinking water standards for transient-noncommunity water

Stevinson Bar and Grill Engineering Report August 2015 Page 8 of 14

systems. However, based on records from Merced County Environmental Health Department, there do not appear to be any concerns with the drinking water quality. A full evaluation of the water quality data will be completed once the monitoring is completed. It is recommended that a new domestic water supply permit be granted to Stevinson Bar and Grill Water System to continue operation of the existing system subject to the following provisions:

- 1. The permitted active source for the Stevinson Bar and Grill Water System is Well No. 1 (PS Code 2400323-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.
- The Stevinson Bar and Grill Water System must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
- 3. The Stevinson Bar and Grill Water System shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
- 4. The Stevinson Bar and Grill Water System must submit an annual report to the Drinking Water Program each year, documenting specific system information for the prior year. The report shall be in the format specified by the Division and be submitted by the deadline specified by the Division.

Report Prepared By:

Kassy D. Chauhan, P.E. Senior Sanitary Engineer

Attachment A: Inspection Photos – June 5, 2015

Attachment B: Emergency Chlorination Plan Guidelines Attachment C: Cross Connection Control Survey Guidance

Attachment D: Bacteriological Sample Siting Plan

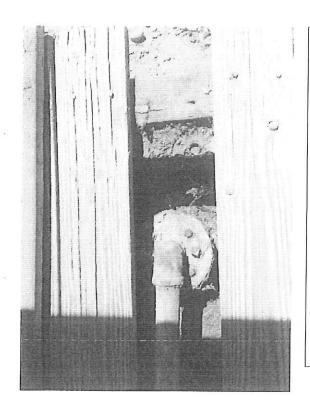
Attachment E: Boil Water Order - Tier 1 Public Notification Template

Attachment F: Water Quality Monitoring Schedule

ATTACHMENT A:

Inspection Photos – June 5, 2015

Inspection Photos Stevinson Bar and Grill Water System System No. 2400323 June 5, 2015



Picture No. 1: The sole source of supply for the Stevinson Bar and Grill is a well that is located beneath the decking that surrounds the front of the bar. There is no concrete surface seal or pedestal. The area around the well was full of cobwebs and dirt. The discharge piping from the well contains a check valve prior to entering the steel pressure tank that is located adjacent to the well. The System must raise the well out from under the decking and install a concrete surface seal/concrete pump pedestal to protect the well from flooding. In addition, the System must keep the area surrounding the well free from debris, cobwebs and dirt.



Picture 2: The well discharges to a pressure tank that provides system pressure. The discharge piping from the pressure tank contains two hosebibs that are used for raw water bacteriological sampling when needed. The raw water sample tap needs to be installed ahead of the pressure tank as described in the report. The system pressure is maintained between 40 and 60 psi.

ATTACHMENT B:

Emergency Chlorination Plan Guidelines





State Water Resources Control Board Division of Drinking Water

State Water Resources and Control Board July 2014

EWIERGENCY DISINFECTION PLAN REQUIREMENTS

An emergency disinfection plan, designed to outline procedures in the event of bacteriological contamination, shall be developed and a copy submitted to our office. The plan shall outline specific response procedures for disinfection of wells, pressure tanks, storage tanks and installation of emergency chlorination equipment. Guidance on the operation of the emergency disinfection equipment, to be included in the Emergency Disinfection Plan, is included in the attached document (Emergency Disinfection Plan Guidance).

The plan shall state that the necessary equipment is on-site or readily available and the means by which to connect and activate it have been provided. Those items needed to accommodate emergency chlorination equipment include:

- An all weather, 110 volt electrical receptacle, energized by the well pump operation.
- A three-quarter (3/4) inch threaded tap on the piping downstream of the well check valves for use as a chlorine injection point.
- A sample tap (non-threaded) at least three to six feet downstream of the chlorine injection point.

The plan should further state that qualified personnel (specify who) are under contract to carry out the plan and install, adjust and operate the equipment as necessary. The plan should also include the treatment or distribution operator certification grade and emergency telephone numbers of water system staff and certified operator(s).

Attachment: Emergency Disinfection Plan Guidance

Emergency Disinfection Plan Guidance for Public Water Systems

The purpose of this Emergency Disinfection Plan (EDP) is to assist utilities implement emergency chlorination. The guidance provided below is designed to facilitate the installation of emergency chlorination equipment and to assist in the setting of chemical dosage in order to maintain acceptable free chlorine residual needed to insure public health protection immediately after a disaster. Items which should be obtained prior to the onset of a disaster include the following equipment:

- 1. Emergency chlorination units.
- 2. Chlorine residual test kits (preferably DPD)
- Granular Calcium Hypochlorite, 65% available chlorine, (liquid sodium hypochlorite has a relatively short shelf life so it is advisable that it not be purchased in advance). Chemicals used for emergency chlorination must be approved under ANSI/NSF¹ Standard 60 (direct additives).

Installation Procedures

A utility should not wait until an emergency has occurred before it attempts to install its emergency chlorination equipment. It is advisable that all field maintenance staff be familiar with the installation procedures in order to quickly install the emergency chlorination equipment. The remainder of this plan addresses the use of hypochlorinators in the event of an emergency. For those utilities which use gas chlorination units, they should already be familiar with their operation if they are using this type of equipment.

The chlorination equipment purchased by the utility must be adequately sized for the proposed installation. The feed capacity of the hypochlorinator should allow the utility to does at a minimum of 5 parts per million free chlorine residual. After the emergency chlorination units have been physically connected to the wells and/or other sources in question, refer to the attached table or use the following procedures to calculate the appropriate settings. If you are unable to perform these calculations, contact a staff of the Drinking Water Program immediately.

The attached tables may be used to mix a solution of a known strength. Decide on a solution strength that you wish to use and find the amount of chlorine needed for a 100 gallon barrel from Table 1.

Table 2 can be used to determine the volume of solution to be added for different flow rates for each mg/L of chlorine dosage. It should be recognized that large capacity wells will need stronger solution strengths or the feed barrel will need to be filled too frequently. The volumes in table 2 are in gallons per day (gpd). If the feed pump capacity is given in gallons per hour, then the volume from Table 2 must be divided by 24 to give a gph value.

To determine the appropriate pump setting, the value from Table 2 must be divided by the feed pump capacity.

Example:

Feed Pump Capacity = 10 gph; Q = 1500 gpm; 7% solution; 5 mg/L dosage

From table 2 → Chlorine Volume = 30.9 gpd for each mg/L.

For $5 \text{ mg/L} \implies 5 \times (30.9) = 154.5 \text{ gpd}$

Since feed pump has a maximum capacity of 10 gph, the appropriate length of stroke setting is:

$$154.5 \times 24 = 0.64$$

10 gph

Outlined below are the equations to use if the Tables are not used:

1. A solution barrel of a known volume must be obtained. The barrel should be filled with a known volume of water. To this volume, a known weight of chemical should be added. The solution strength must be determined using the equation given below:

% solution = Weight of chemical added to solution barrel (lbs) x 100 Weight of water in solution barrel (lbs)

(1 gallon of water weighs 8.34 lbs)

A 6% solution can be obtained by adding one half pound of chemical per gallon of water using a 100 gallon barrel. (see below):

$$50 / (100 \times 8.34 \text{ lb/gal of water}) \times 100 = 5.99 \text{ or } 6\%$$



used to get percentage

To calculate the pounds per hour of chemical that must be added to obtain a know chlorine concentration, the following equation must be used:

Equation #1:

lbs per hour of chemical = $8.34 \times \text{desired dosage in ppm} \times \text{flow rate in gpm} \times 60 \text{ min/1,000,000}$

Assuming the desired dosage is 5 ppm that gives the following equation:

Equation #2: Ibs per hour of chemical = $2.5 \times 10^{-3} \times \text{flow rate in gpm}$

Next you must determine the required gallons per hour of chemical to be added. This must be obtained using the following equation:

Equation #3:

gallons per hour of chemical = lbs per hour / 8.34 / solution strength / 100 (from above)

Once this value has been obtained, then the next step is to review the maximum feed rate in gallons per day of the chemical feed pump. This is generally printed in a label attached to the pump and it may specify the discharge pressure this maximum rate applies to. Most chemical feed pumps have either a length of stroke setting or two settings for frequency of stroke and length of stroke. To determine what settings should be used, a review of the instrumentation on the pump must be conducted.

If two control settings are provided, then set the frequency control at 100% and provide adjustment only to the length of stroke adjustment. The equation to be used to determine at what setting the length of stroke should be, is given below:

Percent length of stroke = gallons per hour (obtained above) \times 24 \times 100 / the pump capacity in gpd

This numerical setting should be used when adjusting the pump. If both pump settings are to be changed from 100%, then the percent stroke equation is as follows:

Percent length of stroke = gallons per hour \times 24 \times 100 / stroke frequency / pump capacity in gpd A check on the actual dosage can be performed by using the total gallons of solution pumped within a known operating period. That information can be used as follows:

Actual Dosage = gallons of solution x solution strengthgallons of water treated in MG

An easier way to use hypochlorination equipment is to have calibration or volumetric feed cylinders installed on the intake line to the pump. If these cylinders are available, then a known volume of solution can be pumped and the time it takes to pump that volume is used to determine gallons per hour at a known discharge pressure. The actual percent solution must still be known to conduct the other calculations.

Once a utility has implemented emergency chlorination of their system, it is important to conduct follow up distribution chlorine residual monitoring to determine the effectiveness of the chlorination process. In the event of an emergency, hypochlorination equipment should be used to dose the system at 2 ppm of free chlorine residual. Chlorine residual monitoring within the distribution system should take place to verify that an adequate residual is being obtained

at all locations within the distribution system. Any areas which have suppressed chlorine residuals should receive further investigation to determine whether or not there are other problems associated with the reduced residuals.

Flushing should be provided if possible, to draw the chlorinated water into the distribution system as soon as possible.

In addition to the chlorine residual monitoring, bacteriological sampling of the distribution system in all areas should be conducted. Chlorine residual monitoring in addition to bacteriological sampling should be used to further define areas of distribution system that need additional investigation. Chlorination of the system should continue until it has been verified that no structural problems exist within the distribution system and all bacteriological monitoring shows that there is no presence of pathogenic organisms.

TABLE 1
AMOUNT OF CHLORINE PER 100 GALLON BARREL*

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Type of Chlorine												
5% Sodium Hypochlorite**		60 gal	80 gal	100 gal								
12.5% Sodium Hypochlorite**		24 gal	32 gal	40 gal	48 gal	56 gal	64 gal	72 gal	80 gal	88 gal	96 gal	
65% Calcium Hypochlorite***		38 Ibs	51 lbs	64 lbs	77 lbs	90 lbs	103 lbs	116 lbs	128 lbs	141 lbs	167 lbs	

^{*} Add the quantity indicated to the 100 gallon barrel and then fill the remaining volume with water.

1: American National Standard Institute (ANSI) or National Sanitation Foundation (NSF)

*** HTH, tablets or granular chlorine

Example: For 10% solution using 12.5% sodium hypochlorite, use 80 gallons of sodium hypochlorite and add 20 gallons of water.

Example:

For 10% solution using 65% available Calcium Hypochlorite (CaHOCl), use

128 lbs of granular chlorine and add water to fill barrel and mix.

^{**} The sodium hypochlorite must be ANSI/NSF¹ certified for potable drinking water and approved as direct additive (ANSI/NSF Standard 60).

TABLE 2
CHLORINE VOLUME REQUIRED GALLONS PER DAY (GPD) PER MG/L OR PPM OF DESIRED CHLORINE DOSAGE*

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Flow Rate												
50 gpm		2.4	1.8	1.4	1.2	1.03	0.9	0.8	0.7	0.7	0.6	0.6
75 gpm		3.6	2.7	2.0	1.8	1.5	1.4	1.2	1.0	1.0	0.9	0.8
100 gpm		4.8	3.6	2.9	2.4	2.0	1.8	1.6	1.4	1.3	1.2	1.1
300 gpm		14.4	10.8	8.6	7.2	6.2	5.4	4.8	4.3	3.9	3.6	3.3
500 gpm		24.0	18.0	14.4	12.0	10.3	9.0	8.0	7.2	6.6	6.0	5.5
800 gpm		38.4	28.8	23.0	19.2	16.5	14.4	12.8	11.5	10.5	9.6	8.9
1000 gpm		48.0	36.0	28.0	24.0	20.6	18.0	16.0	14.4	13.1	12.0	11.1
1500 gpm		72.0	54.0	43.2	36.0	30.9	27.0	24.0	21.6	19.6	18.0	16.6
2000 gpm		96.0	72.0	57.6	48.0	41.1	36.0	32.0	28.8	26.2	24.0	22.2

^{*} Values in the Table are the flow rates in gallons of solution per day that be added for each mg/L of desired dosage.

Example:

Well Discharge = 1,000 gpm

Solution Strength = 5%

Desired Dosage = 5 mg/L or 5 ppm

From Table 2, Need to add 28.8 gpd per mg/L (or ppm)

Therefore, $5 \text{ mg/L} \times 28.8 \text{ gpd/(mg/L)} = 144 \text{ gpd.}$

ATTACHMENT C:

Cross Connection Control Survey Guidelines for Noncommunity Water System

CROSS-CONNECTION CONTROL NON-COMMUNITY WATER SYSTEMS CDPH-MERCED DISTRICT

Purpose of Cross-Connection Control Program

Water provided by a public water system may be contaminated via cross-connections within the user's distribution system. The purpose of the cross-connection control program is to eliminate actual cross-connections and to reduce the hazard of potential cross-connections. This is accomplished by identifying actual and potential cross-connections and either installing appropriate backflow prevention assemblies or ensuring that water-using equipment is installed in accordance with plumbing code requirements and good practice.

What are cross-connections?

Cross-connections are unprotected connections between a potable water system and any source or system containing unapproved water or a substance, which is not safe. Examples of cross-connections include:

- 1. Improperly installed irrigation systems (which may allow back siphoning of stagnant, bacterially contaminated water into the piping system) or premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are or can be injected.
- 2. Improperly plumbed water-using devices such as hot tubs, boilers or commercial dishwashers.
- Irrigation systems served by an auxiliary source, such as an unapproved well or a creek. Such systems, if connected to the drinking water system, create a potential for contamination via cross-connections.
- 4. Interconnections between the potable system and a non-potable system.

How to Comply

For Non-community water systems, the program consists of identification of hazards and protection of the system from these hazards. The program is to be adapted to the size and complexity of the system. The following are the required elements and necessary actions:

- 1. <u>Identification of Hazards</u> -This consists of a review of the system facilities to identify areas of potential contamination via cross-connections. A survey of the system is to be conducted with documentation of the findings. Any facilities that handle wastewater or hazardous liquids require special evaluation to ensure protection of the potable system from contamination.
- Protection of System -Taking action to abate the potential cross-connection by ensuring compliance with plumbing codes, installing and maintaining appropriate backflow prevention assemblies and other means. This includes annual testing and repair or replacement as needed.

Completion and Documentation

Attached is additional information and forms that you can use to help guide you through this program. A survey of the system is to be conducted by a qualified person. Documentation of the survey findings is to be maintained and submitted to the Department when requested.

Attachments - Information and forms for surveys

Notes: 1. Regulatory Authority: Pursuant to Section 7584 of the California Code of Regulations, which states, "The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program".

2. Applicability: Non-community water systems

ELEMENTS OF A CROSS-CONNECTION CONTROL PROGRAM CDPH Merced District

When implementing a Cross-Connection Control Program, the water supplier or health agency should follow an organized plan. The following items should be included as a minimum. The items explain the Department of Health Services' policy regarding the regulations.

7584. Responsibility and Scope of Program

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not limited to, the following elements:

- (a) The adoption of operating rules or ordinances to implement the cross-connection program.

 A public water supplier shall enact an ordinance or rule of service outlining the cross-connection control program and providing enforcement authority.
- Water utilities do not have any responsibility for controlling or abating cross-connections on a user's premises. All existing facilities where potential cross-connections are suspected, however, shall be listed and inspected or reinspected on a priority basis, where feasible. All applications for new services or for enlarging existing services or changing of occupant shall be reviewed or screened for cross-connect1ons hazards. Surveys are intended to be conducted by a person certified by AWWA or ABPA as a cross-connection specialist. A list of persons that have this certification may be obtained by contacting AWWA at (909) 481-7200, ABPA at http://www.abpa.org/, or by contacting the CDPH-Fresno District office.
- (c) The provision of backflow protection at the user's connection or within the user's premises or both.

Adequate provisions for implementation and enforcement of backflow protection where needed including the shutting off service when necessary

- (d) The provision of at least one person trained in cross-connection control to carry out the cross-connection program.
 - Specific units of the health agency and/or water supplier should be designated to organize and carry out the cross-connection control program. The personnel in those units should be trained as to the causes and hazards of unprotected cross-connections.
- (e) The establishment of a procedure or system for testing backflow preventers.

A list of approved backflow preventers and list of certified testers should be made available to each water user required to provide backflow protection.

The list may include backflow devices approved by University of Southern California, Foundation for Cross-Connection Control and IAPMO, which may be found on the CDPH website at the following address:

http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Publications.aspx

The List of certified testers may be lists developed by the American Water Works Association and local county health agencies.

Backflow preventers should be tested at least yearly or more often as required by the health agency or water supplier.

- (f) The maintenance of records of locations, tests and repairs of backflow preventers

 Adequate records should be kept and filed for reference. These records should include, in addition to the name of the owner of the premises, the:
 - a) Date of inspection
 - b) Results of inspection
 - c) Required protection
 - d) List of all backflow preventer devices in the system
 - e) Test and maintenance reports
 - f) All correspondence between the water supplier, the local health authority, and the consumer
 - g) Records must be maintained for a minimum of three years

Records of inspection and testing should be evaluated to determine if:

- a) Devices are frequently or sufficiently reviewed to detect failure.
- b) There are unusual feature of a particular model of device or component.
- c) Cause of failure can be eliminated.

A program should be established to notify the water user when his backflow preventer must be tested. (A minimum of once each year is required.) After installation or repair, a backflow preventer should be tested and approved before it is accepted.

7605. Testing and Maintenance of Backflow Preventers

Regulations require the following regarding testing and maintenance of backflow prevention devices:

- (a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.
- (b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.
- (c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.
- (d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.
- (e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.
- (f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

GUIDELINES FOR CROSS-CONNECTION CONTROL FOR IRRIGATION SYSTEMS

Summary: Public water systems must be protected from actual and potential cross-connections between irrigation systems and domestic water systems. This is accomplished by ensuring that the irrigation system is installed in accordance with the requirements of the Uniform Plumbing Code with appropriate backflow prevention devices.

Special Conditions: For systems with an unapproved auxiliary source serving the irrigation system, additional protective action is necessary to guard against introduction of water from the auxiliary source into drinking water system. The following actions must be taken to guard against this hazard:

- 1. Identify all interties between the domestic system and the irrigation system.
- 2. Either disconnect these interties or install approved backflow prevention devices at each intertie. A Reduced Pressure Principle backflow prevention device is the type of device, which is to be installed.
- 3. Verify that there are no other interconnections between the domestic and irrigation systems. This is accomplished by draining the irrigation system and verifying that it does not refill with water from the domestic system through an undetected cross-connection. This procedure should be repeated on a period basis (once every three months).

Records: Maintain written records of dates of tests, procedures, results and corrective actions taken.

CROSS-CONNECTION SURVEY SUMMARY FORM NON-COMMUNITY WATER SYSTEMS

System Name	Number
Date of Survey	populariana.
Name of person performing survey	
Qualifications of person performing survey	
	3
Description of Survey (Elements of survey, how condu	ucted, hazards identified):
Actions taken (Include description of corrections, back	cflow prevention assemblies installed):
Long-term (Include description of who will ensure or connections and testing of backflow prevention assem	ngoing protection of the system from cross
Other (Include other elements of program):	
Name of person completing this report	Date

ATTACHMENT D:

Bacteriological Sample Siting Plan and Guidelines

BACTERIOLOGICAL SAMPLE SITING PLAN FOR SMALL WATER SYSTEMS

Svsfem No.	公がのなった	700			
2000	2000	7	System Manne: Off	STUTION DUTY OF ILL	
PWS Classification:	cation: TNC	S	No. Mo	No. Monthly Users:	:9
No. Active Se	No. Active Service Connections:	ons: 2	Sampli	Sampling Frequency:	
Name of Train	ned Sampler:	Name of Trained Sampler: デュッレルミチ(4500		1,000
Person respo	nsible to repon	t coliform-positiv	e samples to CDPH:	150	11
Signature of 1	Signature of Water System Representative:	Representative:	in a comment of the second		2
Sample ID	Sample Type	Sample Point	Location of Sample Point	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine	a	なようでよる	TO SEA CROSSE WINSTIC	1 6.0 TOO. S. S. T. T. S. D. N.
1-REP1	Repeat	Truct	The First	いはいったとうという	
1-REP2	Repeat	五	STANG E	Barkor Bical Action Bar	Repeat Sample Only
1-REP3	Repeat	WH	Well No. 1	Men No Landon	Repeat Sample Only
2-ROU	Routine	十九九八十	KIT MON FRANK		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2-REP1	Repeat	2	のようだった		Repeat Sample Only
2-REP2	Repeat	Sin	Cathroom Sink	1	Repeat Sample Only
2-REP3	Repeat	たの	Well No.		Repeat Sample Only
3-ROU	Routine	干仓工	THE FE	ったかっ	サンナラミエリニル
3-REP1	Repeat	ハゴアア	Women's Bathrom	ON LINNAM S ROSTINGON	Repeat Sample Only
3-REP2	Repeat	い。アス	Bair	なよんえス	Repeat Sample Only
3-REP3	Repeat	5	Weil No. 1	Sel No. 1 21/10/2000	Repeat Sample Only
4-ROU	Routine	NSN	BOTHOMSINK	47	Tollowing TO+
4-REP1	Repeat	シェア	が 字	(asset)	, Repeat Sample Only
4-REP2	Repeat	Ē	Outside to	MILTSIME HAS IN THE 18H OF SIMUL Repeat Sample Only	Repeat Sample Only
4-REP3	Repeat	3	Well No. 1		Repeat Sample Only
5-ROU	Routine	シンス	Barran	22.77	4.7. S. T.
5-REP1	Repeat	ST	CHARLES TO	SULKING HOLDING BUILDING	1
5-REP2	Repeat	Sisk	Pathron MSIR		Repeat Sample Only
5-REP3	Repeat	3	Well No. 1	1.09.10	Repeat Sample Only
If chlorine is l	being used, is it	If chlorine is being used, is it used on a continuous basis?	uous basis? Yes No	7	

ATTACHMENT E:

Boil Water Order – Tier 1 Public Notification Template

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien.

DRINKING WATER WARNING

[System] water is contaminated with [fecal coliform or E. coli]

BOIL YOUR WATER BEFORE USING

[Fecal coliform or *E. coli*] bacteria were found in the water supply on [date]. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

What should I do?

- DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.
- Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking water Hotline at 1(800) 426-4791.

What happened? What is being done?

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

[Describe corrective action]. We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

• SCHOOLS: Must notify school employees, students, and parents (if the students are minors).

- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [system].

State Water System ID#: [number]. Date distributed: [date].

ATTACHMENT F:

Water Quality Monitoring Schedule

WATER QUALITY MONITORING SCHEDULE Transient Noncommunity System (TNC1) DATED - January 2015

Chemical - Title 22	MCL (mg/L)	Frequency	
Primary Inorganics - Section 64432			
Aluminum	1	Not Required	
Antimony	0.006	Not Required	
Arsenic	0.010	Not Required	
Barium	1	Not Required	
Beryllium	0.004	Not Required	
Cadmium	0.005	Not Required	
Chromium (Total Chromium)	0.05	Not Required	
Hexavalent Chromium (Chrome 6)	0.010	Not Required	
Cyanide	0.15	Not Required	
Fluoride	2.0	Once only	
Mercury	0.002	Not Required	
Nickel	0.1	Not Required	
Perchlorate	0.006	Not Required	
Selenium	0.05	Not Required Not Required	
Thallium	0.002	Not Required	
Asbestos - Section 64432.2	2.002	, tot toquiou	
Asbestos - Source Water	7 MFL	Not Required	
Nitrate/Nitrite - Section 64432.1	7 1711 to	Not required	
Nitrate (as NO3)	45	Annually if < 23 mg/L (1)	
Nitrite (as nitrogen)	1	Every 3 years if <0.5 mg/L (2)	
Nitrate + Nitrite (sum as nitrogen)	10	N/A	
Secondary Standards - Table 64449-A	10	N/A	
Aluminum	0.2	Not Required	
Color	15	Not Required	
Соррег	1.0	Not Required	
Foaming Agents	0.5	Not Required	
ron	0.3	Once only	
Manganese	0.05	Once only	
Methyl-tert -butyl ether (MTBE)	0.005		
Odor	3	Not Required	
Silver	0.1	Not Required	
Thiobencarb	0.001	Not Required	
Furbidity		Not Required	
Zinc	5	Not Required	
Seneral Minerals - Section 64449	5	Not Required	
Bicarbonate	NI/A		
Carbonate	N/A	Once only	
	N/A	Once only	
lydroxide Alkalinity Calcium	N/A	Once only	
	N/A	Once only	
Magnesium	N/A	Once only	
odium	N/A	Once only	
lardness	N/A	Once only	
H	N/A	Once only	
econdary Standards - Table 64449-B			
DS	500-1000;1500	Not Required	
pecific Conductance	900-1600; 2200	Once only	
Chloride	250-500;600	Not Required	
Gulfate MCL = Maximum Contaminant Level	250-500;600	Not Required	

MCL = Maximum Contaminant Level

⁽¹⁾ Nitrate sampling shall be increased to quarterly following any result \geq 23 mg/L. Upon request, this may be reduced to ar frequency after 4 quarters of monitoring. Contact your district office.

⁽²⁾ Nitrite sampling shall be increased to quarterly following any result ≥ 0.5 mg/L. Upon request, this may be reduced to ar frequency after 4 quarters of monitoring. Contact your district office.

.82			
(*)			
(86)			
4			

DRINKING WATER FIELD OPERATIONS BRANCH

NOTICE OF CITATION ISSUANCE PENALTY

BACKGROUND STATEMENT

The State Water Resources Control Board, Division of Drinking Water, issued Citation No. 03-11-17C-013 for the Stevinson Bar and Grill (Public Water System No. 2400323).

This Citation carries a penalty of \$1,500.00 (one thousand and five hundred dollars).

METHOD OF PAYMENT

Within 90 days of receipt of this Citation, submit a check in the amount of \$1,500.00 made payable to:

SWRCB - Division of Drinking Water

and mail to:

SWRCB Accounting Office ATTN: Drinking Water Program Fees P.O. Box 1888 Sacramento, CA 95812-1888

(Please indicate the Citation Number on the Check)

(Attach Check Here)